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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/454,278 12/03/99 PHAN

L 18563-001110

020350 QM32/0424  
TOWNSEND AND TOWNSEND AND CREW  
TWO EMBARCADERO CENTER  
EIGHTH FLOOR  
SAN FRANCISCO CA 94111-3834

EXAMINER

D. CONNOR, C.

ART UNIT

PAPER NUMBER

3732

DATE MAILED:

04/24/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

6398548

6524101

**Office Action Summary**

Application No.

09/454,278

Applicant(s)

PHAN ET AL.

Examiner

Cary E. O'Connor

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 6, 10, 11 and 13-37 is/are rejected.
- 7) ☒ Claim(s) 2-4, 7-9 and 12 is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 1999 is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

**Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22-25, 30-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites the limitation "the second dental positioning appliance" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

In claim 23, line 2, it is unclear if "a third dental positioning appliance" is the same third dental positioning appliance set forth in claim 22, line 2 or an additional one.

In claim 30, line 2, the term "and/or" is indefinite.

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 15-21, 26-31, 33-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Abbatte et al (5,055,039). Abbatte teaches a dental positioning appliance and method for producing comprising an attachment body 40 having a base which is mountable on a dental feature. The body is suitable for receiving a removably attachable dental appliance 60. The dental appliance is formed over a mold 26 having the attachment body mounted thereon. Abbatte also teaches a method for bonding the attachment body 40 to a dental surface wherein the attachment device is inserted into a receptacle in a template 64 and positioning the template over the dental features with an adhesive between the bonding surface of the attachment body and the surface of the dental feature.

Claim 5 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lemchen (5,011,405).

Claims 10, 11 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato (5,964,587). Note Figs. 5(a)-5(c) and column 1, lines 46 + .

Claims 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Sondhi et al (5,971,754). Note the template 22, attachment device 16, adhesive 18 on the attachment device and adhesive 26 on the dental feature.

Claims 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Lavin (3,922,786). Lavin shows a dental attachment device comprising an attachment body 34 having a base which is mountable on a dental feature and the body is suitable for receiving a removably attachable dental appliance 19.

Claims 28-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Anthony (5,957,686). Anthony shows a dental attachment device comprising an attachment body 62 having a base which is mountable on a dental feature and the body is suitable for receiving a removably attachable dental appliance 82.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abbatte et al (5,971,554) in view of Lemchen (5,011,405). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the mold of Abbatte using a digital model of the dental feature and the attachment body, in view of Lemchen, in order to provide a more accurate mold.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (5,964,587) in view of Abbatte et al (5,055,039). Sato teaches only forming a single attachment device at a time. Abbatte teaches forming a multi-tooth template positionable over a plurality of dental features. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form a multi-tooth template of Sato, in view of Abbatte, so that a plurality of attachment bodies may be placed at one time, thus saving time.

#### **Allowable Subject Matter**

Claims 2-4, 7-9 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 22-25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### **Drawings**


This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 110 (page 13, line 1). Correction is required.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 703-308-2701. The examiner can normally be reached on M-F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on 703-308-2696. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0758 for regular communications and 703-308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

  
Cary E. O'Connor  
Primary Examiner  
Art Unit 3732

ceo  
April 20, 2001